Checkers Drive-Thru

nPhase Enlists Opto 22 SNAP-IT for Checkers Drive-Thru Monitoring, Timing, and Data Acquisition and Distribution

Introduction
Tampa, Florida-based Checkers Drive-In Restaurants, Inc., the nation’s 9th largest hamburger chain, owns, operates, and franchises 796 quick-service restaurants under the two brand names “Checkers®” and “Rally’s®.” To further its goal of providing fast and efficient automobile-oriented food service, the company has implemented a very successful “double drive-thru” concept, capitalizing on the fact that approximately fifty percent of all quick-service restaurant business is done at the drive-thru. All Checkers and Rally’s food is made fresh to order and is sold at everyday low prices. Customers also enjoy the restaurants’ 1950’s décor, walk-up ordering, and outdoor dining in picnic areas.

Technology Investments Create Measurable ROI
In July 2003, Checkers Drive-In Restaurants (NASDAQ: CHKR) announced a revenue increase of 7.7% or $46.0 million for the 2nd quarter of 2003. This compares to the year before when revenue totaled $42.7 million over the same period. The company attributed this increase to improving same-store sales, which increased 11.9%. (In comparison, a week prior to Checkers’ announcement, McDonald’s reported growth of only 6.4% in U.S. same-store sales.)

So what’s responsible for Checkers’ success? According to Keith Sirois, President and Chief Executive Officer of Checkers, “In my view, it’s a by-product of our ongoing investments in people, technology, and marketing.” Among other things Sirois is referring to is Checkers’ new advertising campaign, as well as several promotional events with the Indianapolis 500 and Brickyard 400. These successful marketing and PR programs notwithstanding, Dennis Joe, an analyst at the New York research house Sidoti & Co. states, “the primary reason that same-store sales have improved so much is that Checkers has been able to lower the amount of time in the [drive-thru] queue. It helps customer traffic not only in terms of processing, but also in terms of getting them to come back to the restaurant.”
Drive-thru times are critical for all quick-serve restaurants. This is especially true for Checkers and Rally’s because these restaurants specifically cater to customers who want a meal to go. Indeed, Checkers and Rally’s are so automobile-centric that they have not one, but two drive-thru lanes so they can serve two customers at once. This year, Checkers focused on increasing customer throughput and began searching for technologies that would enable this. The company eventually sourced a solution from the Chicago, Illinois firm nPhase, LLC.

nPhase, a Machine-to-Machine (M2M) technology company, delivers tailored, enterprise-class M2M solutions for monitoring and managing widely dispersed machine assets on a global scale. nPhase delivers its M2M solutions to markets quickly and with low capital investments and minimal internal labor commitment for its customers. nPhase was able to develop and integrate a drive-thru timer and communications system for the Checkers restaurants. The hardware for this system was designed and manufactured by Opto 22 of Temecula, California and consists of the company’s intelligent SNAP-IT system, combined with sensor technology installed in the drive-thru lanes. Essentially, multiple wire loops are embedded in each lane. When a vehicle passes over, the metal in the car changes the inductance, causing a variation in the wires’ circuit current. The SNAP-IT unit receives these inductive vehicle detection signals through digital input modules on the SNAP rack. The system then activates several in-store displays, which let restaurant employees know that there are customers at the drive-thru. “Most quick-serve establishments use this wire loop method as opposed to sensors that measure direct pressure,” explains Application Engineer Terry McCulloh, who helped install and program the Opto 22 systems for Checkers. “There’s no wear and tear on the sensor which means that overall system performance is less likely to degrade over time.”

The Value of “Fresh” Data

With sensors at both the menu and pick-up windows of each drive-thru lane, restaurant management now has a method to evaluate service by knowing exactly how much time each vehicle is spending at each phase of the drive-thru. But Checkers’ new system offers much more than just timing. nPhase developers created an application that routes the SNAP-IT sensor information to a customized data warehouse used by Checkers at the corporate level. This connection allows the store manager to view drive-thru data in real time while also providing an enterprise level view for analysis, trending and reporting purposes. At this level, the data becomes even more valuable as it helps create business intelligence that positively impacts many different aspects of restaurant operations. For example, management can identify the drive-thru’s busiest hours, which greatly helps when structuring employee schedules. Checkers can also now more easily identify customer service problems in its drive-thru lanes. “Previously, long waits could be attributed to a number of different factors,” says Checkers Chief Financial Officer David Koehler. “It was basically just guesswork. Now, with the new system, our restaurant managers can identify slow turnover at the menu window (which may just be a result of customers not being able to make up their minds) as opposed to slow turnover at the service window, which indicates that food is not being prepared and bagged quickly enough.” This solution helped Checkers decrease the time it took to service a customer from an average of 2.6 minutes at the beginning of the first quarter of 2003 to 1.34 minutes per car by the end of second quarter 2003. Moreover, customers are experiencing an 18% reduction in the average wait time at the drive-thru while average traffic count has increased 10%.
Checkers is also comparing its drive-thru information to its point-of-sale (POS) data to determine the most popular menu items during the busy periods. This, of course, helps the restaurant be better prepared and have the right amounts of food product on-hand and ready to be cooked.

**Next Steps**

Exceedingly happy with the connectivity and monitoring capabilities of its new system, Checkers is gearing up for a Phase II integration that will address energy and temperature management concerns at its restaurants. “One of the terrific things about this system is its modularity and versatility. We can use it to link to, monitor, and acquire data from nearly every machine and system in the restaurant,” attests Bill Lindfors, Manager of Technical Support at Checkers. Lindfors says Checkers will soon be tapping into its restaurant refrigerators, freezers, fryers, and air conditioning systems. For these applications, Opto 22 is up to the job. The company already has SNAP-IT up and running for similar projects at Burger King, Taco Bell, and Sonic Burger. “Knowing that Opto 22 had this experience in the quick-serve industry gave us a lot of confidence in using their products to build this solution,” says Steve Pazol, CEO of nPhase. Koehler agrees. “With Phase II of this integration, we’re enabling much more comprehensive restaurant management and stepping well beyond the boundaries of what most of our competitors are doing. To accomplish this, it’s imperative that we partner with companies who have products and experience in our business. nPhase was able to offer us a proven solution that was powerful, straightforward, and cost-effective.”

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**About Opto 22**

Opto 22 manufactures and develops hardware and software products for applications in industrial automation, remote monitoring, and enterprise data acquisition. Using standard, commercially available Internet, networking, and computer technologies, Opto 22’s SNAP systems allow customers to monitor, control, and acquire data from all of the mechanical, electrical, or electronic assets that are key to their business operations. Opto 22’s products and services support automation end users, OEMs, and information technology and operations personnel. Founded in 1974 and with over 80 million Opto 22-connected devices deployed worldwide, the company has an established reputation for quality and reliability. Opto 22 products are sold through a worldwide network of distributors, partners, and system integrators. For more information, contact Opto 22 headquarters at 800-321-OPTO or visit our Web site at [www.opto22.com](http://www.opto22.com).